

Application No. 10/656,345  
Amendment dated June 13, 2005  
Reply to Office Action of April 6, 2005

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings of claims in the application:

#### **Claims:**

1. (Currently Amended) A bioprosthetic device for soft tissue attachment, reinforcement, or construction, the device comprising:  
a sheet of naturally occurring extracellular matrix; and  
a sheet of synthetic mesh coupled to the naturally occurring extracellular matrix,  
wherein the sheet of synthetic mesh has a rate of absorption that is slower than a rate of absorption of the sheet of naturally occurring extracellular matrix.
2. (Original) The bioprosthetic device of claim 1, wherein the sheet of naturally occurring extracellular matrix is a sheet of SIS.
3. (Original) The bioprosthetic device of claim 1, wherein the sheet of naturally occurring extracellular matrix and the sheet of synthetic mesh are generally planar.
4. (Original) The bioprosthetic device of claim 1, wherein the sheet of naturally occurring extracellular matrix is a top tissue layer of naturally occurring extracellular matrix and is coupled to a bottom tissue layer of naturally occurring extracellular matrix, and the sheet of synthetic mesh is coupled to and positioned to lie between the top tissue layer and the bottom tissue layer.
5. (Original) The bioprosthetic device of claim 1, wherein the sheet of synthetic mesh includes a length and a width equal to or greater than a length and a width of the sheet of naturally occurring extracellular matrix.
6. (Withdrawn) The bioprosthetic device of claim 5, wherein the naturally occurring extracellular matrix is dehydrated and length and width of the sheet of naturally occurring extracellular matrix is the same as the length and width of the sheet of synthetic mesh.
7. (Previously presented) The bioprosthetic device of claim 4, wherein the sheet of naturally occurring extracellular matrix is circular in shape and the sheet of synthetic mesh is circular in shape.
8. (Original) The bioprosthetic device of claim 1, wherein the sheet of naturally occurring extracellular matrix comprises multiple layers of naturally occurring extracellular matrix.

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9. (Original) The bioprosthetic device of claim 1, wherein the sheet of naturally occurring extracellular matrix is perforated.

10. (Currently Amended) A bioprosthetic device for soft tissue attachment, reinforcement, or construction, the device comprising:

~~\_\_\_\_\_The bioprosthetic device of claim 1, further comprising multiple sheets of~~  
naturally occurring extracellular matrix; and

~~\_\_\_\_\_multiple sheets of synthetic mesh coupled to the naturally occurring extracellular~~  
~~matrix, wherein the bioprosthetic device comprises a stack of the sheets of naturally occurring~~  
extracellular matrix separated by the sheets of synthetic mesh.

11. (Original) The bioprosthetic device of claim 1, wherein the sheet of synthetic mesh is coated with comminuted SIS.

12. (Original) The bioprosthetic device of claim 1, wherein the sheet of synthetic mesh is bioabsorbable.

13. (Cancelled)

14. (Original) The bioprosthetic device of claim 1, wherein the synthetic portion comprises a material selected from the group consisting of Prolene<sup>TM</sup>, Vicryl<sup>TM</sup>, and Mersilene<sup>TM</sup>.

15. (Currently Amended) A bioprosthetic device for soft tissue attachment, reinforcement, and/or reconstruction, the device comprising:

a top sheet of small intestinal submucosa (SIS) comprising multiple SIS tissue layers, the top sheet having a first surface area,

a bottom sheet of SIS comprising multiple SIS tissue layers, the bottom sheet having a second surface area, wherein the first area and second area are the same;

and a mesh device having a third surface area, the mesh device coupled to and positioned to lie between the top and bottom sheets of SIS, wherein the sheet of synthetic mesh has a rate of absorption that is slower than a rate of absorption of the sheet of naturally occurring extracellular matrix.

16. (Withdrawn) The bioprosthetic device of claim 15, wherein the third surface area is equal to the first and second surface areas.

17. (Original) The bioprosthetic device of claim 15, wherein the third surface area is greater than the first and second surface areas.